

Date: Tuesday, 7/11/2006 12:52:36 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LONG STEP ASSEMBLY HIGH SKID LH
Job Number : 27854	
Estimate Number : 10270	
P.O. Number : N/A	Part Number : D350591311
This Issue : 7/11/2006 S.O. No. : N/A	Drawing Number : D3272 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LARGE FAB ASSY	Drawing Revision : A
Previous Run : 27424	Material : N/A
Written By : <i>See comment below</i>	Due Date : 8/12/2006 Qty: 10 Um: Each
Checked & Approved By : <i>06.07.11</i>	
Comment : Est Rev: A 04.03.22 New issue KJ/RF	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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**Comment:** DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

PER ATTACHED

2.0	D2622120C	Extrusion
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2622-120 Extrusion *822072**PE 06.07.24 10*

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 116.25" long as per Dwg D3272 using cutting table setup DT 8185-2A

PE 06.07.24 10

2-Drill extrusion as per Dwg D3272 using Jig DT8680 for rivets.

PE 06.07.24 10

3-Deburr

PE 06.07.24 10

4.0	QC5	INSPECT WORK TO CURRENT STEP
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**Comment:** INSPECT WORK TO CURRENT STEP*PE 06-07-24*

5.0	D30671	End Plate
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Tuesday, 7/11/2006 12:52:37 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D3067-1 End Plate 327691

RF. 06-07-24

10

6.0

D32191

Support



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D3219-1

Support

27865 = 7
328027 = 13

RF. 06-07-24

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod M100660

3-Grind End Plate flush

RF. 06-07-24

RF. 06-07-24

FF 06-07-27

10

10

10

8.0

QC5/9

WELD INSPECTION



Comment: Inspect weld and work to Step 9

J. M. 06/07/27 (10)

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

m.f. 06/07/31

(10)

10.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

RF. 06-07-3

10

11.0

D3065041

Step Leg Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3065-041

Step Leg Assy

326928

RF. 06-08-3

10

W/O:		WORK ORDER CHANGES					
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

D30661

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 D3066-1

Spacer

327666 = 17
327864 = 3

P.E. 06.08.3

10

13.0

MS20600AD4W4

Rivets



Comment: Qty.: 16.0000 Each(s)/Unit Total: 160.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

16 MS20600AD4W4

Rivet

180
M19085 = ~~180~~

P.E. 06.08.3

10

14.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble Leg Assembly as per Dwg D3272.

P.E. 06.08.3

10

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06.08.03

10

16.0

D30671

End Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D3067-1

End Plate

327591

P.E. 06.08.3

10

17.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Bevel Aft end for welding

2-Inspect for foreign object as per QSI 024

3-Weld Aft End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod

M100660
M15689

P.E. 06.08.3

P.E. 06.08.4

P.E. 06.08.4

10

10

10

W/O: <u> </u>		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

4-Grind End Plate flush

18.0

QC5/9

WELD INSPECTION



Comment: Inspect work & Weld to Current - Check dimension 108.93" & 3.375" as per Dwg D3272

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
touch up alodine

20.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING
Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

21.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1
Wing Walk as per Dwg D3272 and QSI 005 4.4

22.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: Inspect Powder Coat and Wing Walk

23.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Pick Packing Kit

24.0

D22303

Mounting Lug



Comment: Qty.: 4.0000 Each(s)/Unit Total: 40.0000 Each(s)
Pick: Packing Kit
Qty Part Number Description Batch
4 D2230-3 Mounting Lug

25.0

D2618

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 20.0000 Each(s)
Pick: Packing Kit
Qty Part Number Description Batch
2 D2618 Bushing

W/O:		WORK ORDER CHANGES					
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

D2856400

Abrasion Strip



Comment: Qty.: 0.6000 f(s)/Unit Total : 6.0000 f(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2856-400-720 Abrasion Strip 327545 ✓

27.0

D32351

Mounting Lug



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D3235-1 Mounting Lug 327866 ✓

28.0

D3278041

Support Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 D3278-041 Support Assembly B27593 x 2, B 27867 x 8
1 D3272-041(ref) Step Assembly B 27857

29.0

AN335A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN3-35A Bolt M19551 ✓

30.0

AN413A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 AN4-13A Bolt M101149 68mcyl

M101894 12 ✓

W/O:		WORK ORDER CHANGES					
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

31.0

AN536A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-36A

Bolt

M19073 ✓

32.0

AN960JD10

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD10

Washer

M100743 ✓

33.0

AN960JD416

Washer



Comment: Qty.: 16.0000 Each(s)/Unit Total : 160.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

16 AN960JD416

Washer

M1185 ✓

34.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 40.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516

Washer

M101369 ✓

35.0

MS21042L3

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L3

Nut (or -3)

M100094 ✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/08/27

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Tuesday, 7/11/2006 12:52:38 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LONG STEP ASSEMBLY HIGH SKID LH

Job Number: 27854

Part Number: D350591311

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS21042L4

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 80.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

8 MS21042L4 Nut (or -4) M19085 ✓

37.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 20.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5) M101648 ✓ LB 06/08/18 (10)

38.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

39.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D350-591-311

Location: -

REV B

LB 06/08/21 (10)
LB 06/08/17 (10)

40.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

LB 06.08.23

Job Completion



LB 06.08.22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>HH</i>	APPROVED <i>HH</i>	DRAWING NO. D3272	REV. A SHEET 1 OF 2
DATE 04.03.01		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	

RELEASED
04.04.05 *HH*

Part No.	Description	QTY -041	QTY -042
D3272-041	Step Assembly, High Long (LH)	X	
D3272-042	Step Assembly, High Long (RH)		X
D2622-120	STEP EXTRUSION	1	1
D3219-1	SUPPORT	2	2
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

GENERAL NOTES:

- 1) -041 SHOWN, FOR -042 INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

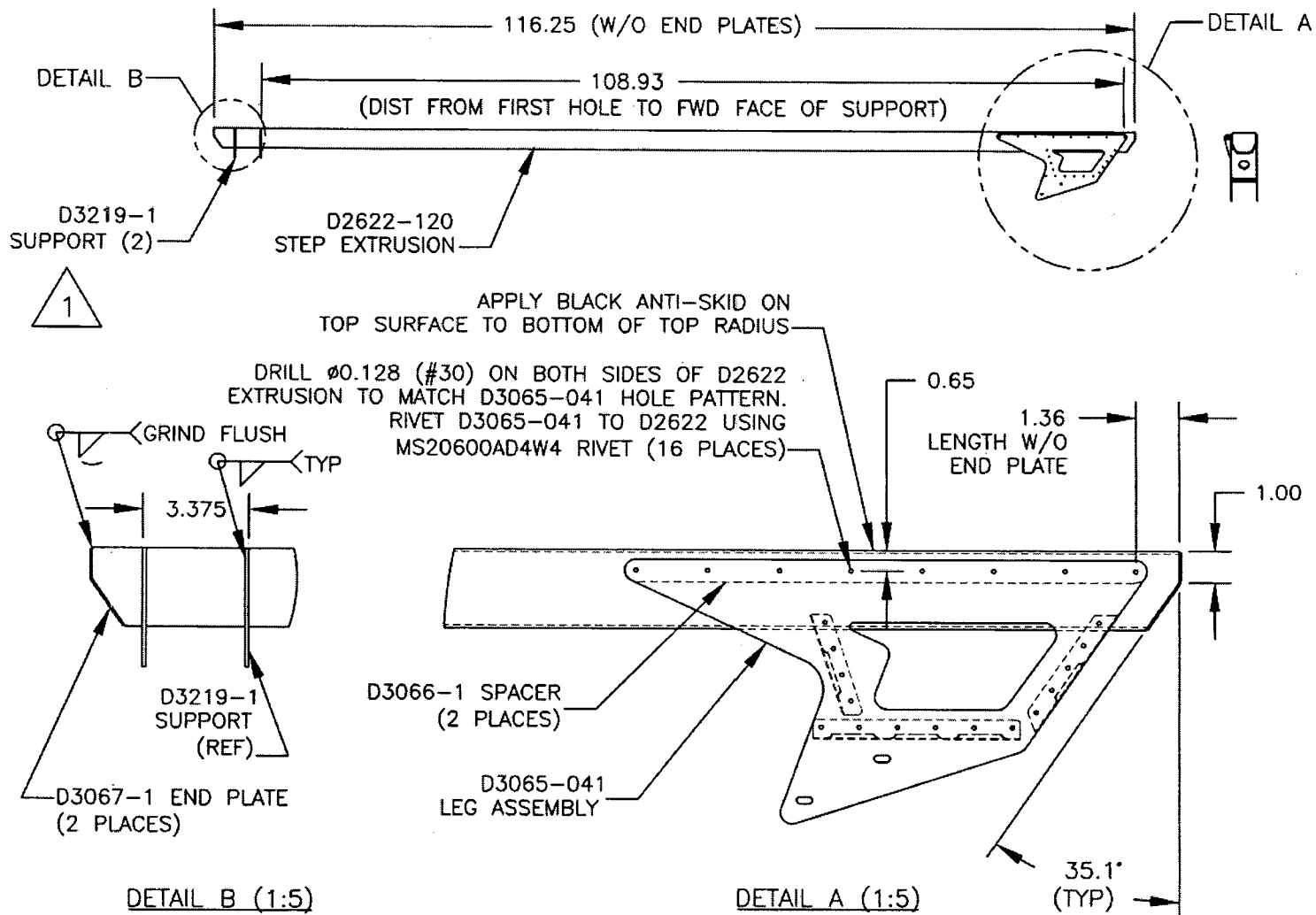
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *27854*

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DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
DATE	DRAWING NO.	REV. A
04.03.01	D3272	SHEET 2 OF 2
	TITLE	SCALE
	STEP ASSEMBLY, HI LONG	1:20



DETAIL B (1:5)

DETAIL A (1:5)

RELEASEDNO. 2854
WORK ORDERUNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
ENGINEERING
RETURN TO
SHOP COPY

Date: Tuesday, 7/11/2006 12:52:36 PM
 User: Kim Johnston

Process Sheet

32

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LONG STEP ASSEMBLY HIGH SKID LH
Job Number	: 27854		
Estimate Number	: 10270		
P.O. Number	:	Part Number	: D350591311
This Issue	: 7/11/2006 S.O. No. :	Drawing Number	: D3272 REV A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1/1 Type : LARGE FAB ASSY	Drawing Revision	: A
Previous Run	: 27424	Material	:
Written By	:	Due Date	: 8/12/2006 Qty: 10 Um: Each
Checked & Approved By	: <u>JA 06.07.11</u>		
Comment	: Est Rev: A 04.03.22 New issue KJ/RF		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

06.07.25 JA

2.0	D2622120C	Extrusion
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2622-120 Extrusion

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
-----	-------------	------------------------------



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622-120 extrusion to 116.25" long as per Dwg D3272 using cutting table setup DT 8185-2A

2-Drill extrusion as per Dwg D3272 using Jig DT8680 for rivets.

3-Deburr

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

5.0	D30671	End Plate
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REFERENCE ONLY

Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Pick:

Qty Part Number Description Batch